Antec 25
A Quarter Century of Quality and Innovation

# SONATA IV

# SONATA IV USER'S MANUAL

Congratulations on your purchase of the Antec Sonata IV

Antec presents the Sonata IV, built from the ground up for Quiet Computing™ to continue the legacy of its predecessors. All of the features in the Sonata IV optimize the case's quiet design, from the included 620-watt power supply with silent 120 mm fan, to the redesigned case airflow that allows for maximum cooling with minimal fans, to the vibration-reducing silicone grommets for hard drives. Sonata IV is also the most capable Sonata to date, offering a 2.5" drive mount and front-panel USB 3.0.

At Antec, we continually refine and improve our products to ensure the highest quality. It's possible that your new case will differ slightly from the descriptions in this manual. This isn't a problem; it's simply an improvement. As of the date of publication, all features, descriptions, and illustrations in this manual are correct.

**Disclaimer**

This manual is intended only as a guide for Antec's computer enclosures. For more comprehensive instructions on installing the motherboard and peripherals, please refer to the user's manuals that come with those components.

# Table of Contents

**Introduction**
1.1 Quiet Computing™ Features ..... 3
1.2 Case Specifications ..... 3
1.3 Diagram ..... 3

**Hardware Installation Guide**
2.1 Setting Up ..... 4
2.2 Motherboard Installation ..... 5
2.3 Internal 2.5” Device Installation ..... 5
2.4 Internal 3.5” Device Installation ..... 6
2.5 External 3.5” Device Installation ..... 7
2.6 External 5.25” Device Installation ..... 7
2.7 Cable Organizer ..... 7

**Connecting the Front I/O Ports**
3.1 USB 2.0 Ports ..... 8
3.2 USB 3.0 Port ..... 8
3.3 AC’ 97 / HD Audio Ports ..... 8
3.4 Power Switch / Reset Switch / Hard Disk Drive LED Connectors ..... 9
3.5 Rewiring Motherboard Header Connectors ..... 9

**Cooling System**
4.1 TriCool™ Fan ..... 10
4.2 Washable Air Filters ..... 10

# Introduction

## 1.1 Quiet Computing™ Features

The Sonata IV is designed with Quiet Computing™ in mind. Many unique design features help make this case quiet and cool.

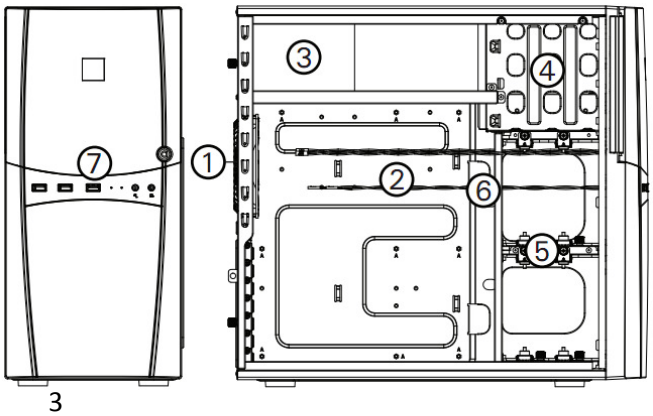
1. Solid steel structure (0.8 mm thick steel).
2. Multiple compartments dedicated for motherboard and hard disk drives.
3. Unique hard drive mounting system for maximum noise reduction.
4. Side intake vents designed to maximize passive airflow.
5. Quiet 120 mm TriCool™ rear exhaust fan.
6. Built-in cable management to tuck away extra cables behind the drive cage.
7. Included 620-watt power supply with 120 mm double ball bearing low noise cooling fan.

## 1.2 Case Specifications

| | |
|---|---|
| Case Type | Quiet Mini Tower |
| Color | Piano Black |
| Dimensions | 17.3" (H) x 8.2" (W) x 18.8" (D)<br>440 mm (H) x 208 mm (W) x 478 mm (D) |
| Weight | 21.1 lbs / 9.6 kg |
| Cooling | 1 x rear 120 mm TriCool™ fan |
| Drive Bays | 8 Drive Bays:<br>- 3 x 5.25" external<br>- 4 x 3.5" internal<br>- 1 x 2.5" internal<br>- 1 x 3.5" external drive bay bracket (Optional) |
| Motherboard Size | Mini-ITX, microATX, standard ATX |
| Front I/O Panel | 2 x USB 2.0<br>1 x USB 3.0<br>AC'97 / HD Audio In und Out |

## 1.2 Diagram

1. Rear 120 mm TriCool™ fan
2. Motherboard Mount: Mini-ITX, microATX or standard ATX
3. 620W power supply
4. 3 x 5.25" external drive bays
5. 4 x 3.5" HDD trays
6. 1 x 2.5" SSD
7. Front I/O Panel



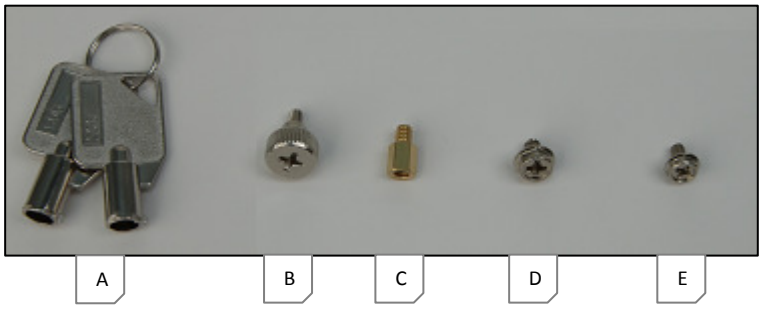
# Hardware Installation Guide

## 2.1 Setting Up

1. Place the case upright on a flat, stable surface.
2. Loosen the thumbscrews from the left side panel. Remove by swinging panel out.
3. Loosen the thumbscrews from the right side panel. Remove by swinging panel out.

**Note:** Do not use your fingernails to pry or lift the panels.

4. Inside the case you should see a brown box secured by a single screw. Inside the box are parts and screws you may need during installation. These parts and screws are as follows:




A. Front panel keys (2)
B. 2.5” drive bay thumb screw (4)
C. Motherboard standoff (9; 6 preinstalled)
D. Motherboard / auxiliary screw (15)
E. Optical drive / 5.25”-to-3.5” adapter bracket screw / side filter screw (18)

### 2.2 Motherboard Installation

This manual does not cover CPU, RAM or expansion card installation. Please consult your motherboard manual for specific mounting instructions and troubleshooting.

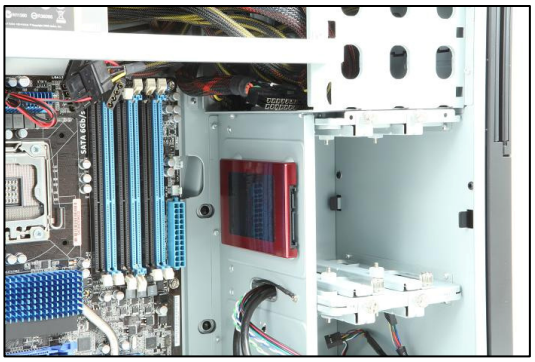
1. Make sure you have the correct I/O panel for your motherboard. If the panel provided with the case isn't suitable, please contact your motherboard manufacturer for the correct I/O panel.
2. To remove the I/O panel, press the panel from the outside pushing towards the inside.
3. Line up your motherboard with the standoff holes, and remember which holes are lined up. Not all motherboards will match with all the provided holes; this is normal, and will not affect functionality.
4. Lift and remove motherboard.
5. Screw the brass standoffs into the threaded holes that line up with your motherboard. Do not over-tighten the standoffs. Some standoffs may be preinstalled for your convenience.
6. Place your motherboard on the brass standoffs.
7. Fasten your motherboard to the standoffs with the provided Philips-head screws. Your motherboard is now installed.

## 2.3 Internal 2.5" Device Installation

**Note**: If you are planning to install both 2.5" and 3.5" drives, you must install the 2.5" drive first. Installing a 3.5" drive first will prevent you from installing the screws for a 2.5" drive.

To the left of the 3.5" hard drive cage is a space to mount a 2.5" drive. To utilize this drive mount:

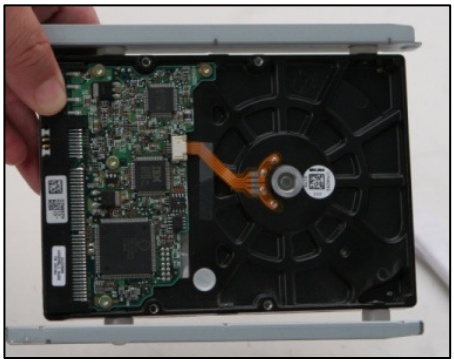
1. Place the drive and hold on top of the four raised mount points.
2. Locate the thumbscrews in the bag labeled "for 2.5 HDD". Use these screws to secure the drive.



## 2.4 Internal 3.5” Device Installation

This case offers a unique hard disk mounting system. There are two dedicated hard disk compartments right under the external 5.25” drive cage. Each compartment can hold two hard disk drives.

1. Open the side panel as described in Setting Up. You will find four metal mounting rails with soft silicone grommets preinstalled inside each of the HDD compartments. Each drive rail is fastened inside the compartment with a thumb screw. You will need two mounting rails to mount a HDD. One rail is fastened to the upper wall of the compartment and the other rail is fastened to the lower wall of the compartment.
2. Remove both the upper and the lower mounting rails by loosening the thumb screws.
3. Fasten the rails to the sides of the HDD through the silicone grommets with the special screws provided.



**Note:** Don’t over-tighten. Over-tightening the screws will harm the vibration and noise reduction qualities of the silicone grommets.

4. Slide the HDD assembly into the compartment.
5. The connectors of the drive must face the left side panel (away from the intake vent).
6. Use the thumb screws to fasten the HDD assembly into the case.
7. Find the appropriate power connector on the PSU and connect the device.
8. Find the appropriate data cable and connect the hard drive to the motherboard.

## 2.5 External 3.5” Device Installation

To install a floppy drive, card reader or other external 3.5” device using the 5.25” to 3.5” adapter:

1. Locate the 5.25” to 3.5” adapter bracket.
2. Place the device in the adapter and fasten with the screws provided.
3. Install the drive rails to the adapter as described in the External 5.25” Device Installation section.
4. Slide the drive into the drive bay until you hear a click.

5. Connect the appropriate data and power cables from the device to the motherboard.

### 2.6 External 5.25” Device Installation

There are three external 5.25” drive bays.

1. Carefully remove the plastic cover and metal plate covering the drive bay.
2. Make sure the clip on the end of the drive rail is angled away from the device and facing forward. Mount a plastic drive rail on each side of the 5.25” device.
3. Slide the device into the drive bay until you hear a click.
4. Connect the appropriate data and power cables from the device to the motherboard.

### 2.7 Cable Organizer

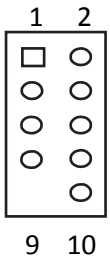
Instead of running all the power cables into the motherboard compartment, the cables can be organized between the motherboard and right side panel.

1. Remove both side panels.
2. Choose the cables you would like to hide or pass through the organizer behind the motherboard tray.
3. Run the cables to the organizer and use the cable ties to hold them in place.

## Connecting the Front I/O Ports

### 3.1 USB 2.0 Ports

Connect the front I/O panel USB cable to the USB header pin on your motherboard. Check the motherboard manual to ensure that it matches the table below:



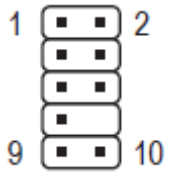

| Pin | Signal Names | Pin | Signal Names |
|---|---|---|---|
| 1 | USB Power 1 | 2 | USB Power 2 |
| 3 | Negative Signal 1 | 4 | Negative Signal 2 |
| 5 | Positive Signal 1 | 6 | Positive Signal 2 |
| 7 | Ground 1 | 8 | Ground 2 |
| 9 | Key (No Connection) | 10 | Empty Pin |

## 3.2 USB 3.0 Port

There is a pre-routed cable for the front-panel USB 3.0 port. Plug the back end of this cable into an on-board USB 3.0 port on your motherboard to enable the front USB 3.0 port.

## 3.3 AC'97 / HD Audio Ports

There is an Intel® standard 10-pin AC'97 connector and an Intel® 10-pin HDA (High Definition Audio) connector linked to the front panel of the case.



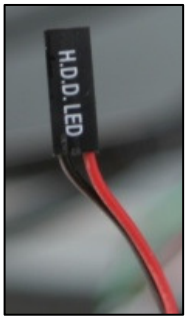

| Pin | Signal Names (HDA) | Pin | Signal Names (AC'97) |
|---|---|---|---|
| 1 | MIC2 L | 1 | MIC In |
| 2 | AGND | 2 | GND |
| 3 | MIC2 R | 3 | MIC Power |
| 4 | AVCC | 4 | NC |
| 5 | FRO-R | 5 | Line Out (R) |
| 6 | MIC2_JD | 6 | Line Out (R) |
| 7 | F_IO_SEN | 7 | NC |
| 8 | Key (no pin) | 8 | Key (no pin) |
| 9 | FRO-L | 9 | Line Out (L) |
| 10 | LINE2_JD | 10 | Line Out (L) |

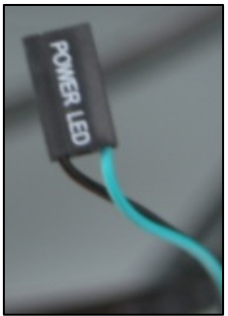
You can connect either the AC'97 or the HDA connector, depending on the model of the motherboard. Locate the internal audio connectors from your motherboard or sound card and connect the corresponding audio cable. Consult your motherboard or sound card manual for the pin-out positions. Even if your system supports both audio standards, you may only use one connector.

## 3.4 Power Switch / Reset Switch / Hard Disk Drive / Power LED Connectors

Connected to your front panel are LED and switch leads for power, reset, HDD and Power LED activity. Attach these to the corresponding connectors on your motherboard. Consult your motherboard manual for specific pin header locations. For LEDs, colored wires are positive ( + ). White or black wires are negative ( – ). If the LED does not light up when the system is powered on, try reversing the connection. For more information on connecting LEDs to your motherboard, see your motherboard manual.

**Note**: Polarity (positive and negative) does not matter for switches.

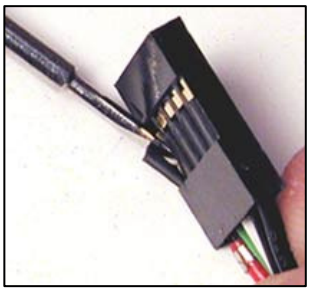


### 3.5 Rewiring Motherboard Header Connectors

If a case connector does not have the same pin-out as the corresponding motherboard header, it may need to be reconfigured. Examples could be for your USB header, audio input header, or some other front panel connector such as the Power Button connector.

Before performing any work, please refer to your motherboard manual or your motherboard manufacturer's website to be sure of the pin-out needed for your connector. We strongly recommend making a notated drawing before beginning work so that you can recover if your work is disturbed.



1. Determine which wires you need to remove in order to rewire your plug to match the USB pin-outs on your motherboard (refer to your motherboard manual). Working on one connector at a time, use a very small flathead screwdriver or similar tool to lift up on the black tab located beside the gold posts (squares). This will allow you to easily slide out the pins from the USB plug.
2. Working carefully so as not to damage the wires, connectors, or pins, slowly remove the pin from the connector. Repeat these steps for each wire you need to change.
3. Slowly reinsert the pin into the correct slot of the connector, then snap closed the black tab that was lifted in step 1. Repeat these steps for each wire you need to change.

# Cooling System

### 4.1 TriCool™ Fan

There is one 120 x 25 mm TriCool™ fan pre-installed at the rear of the case. This fan is installed so air will be blown out of the case. It has a 3-speed switch that lets you choose between quiet, performance or maximum cooling. This switch is located at the rear of the case. The default fan speed setting is low.

| | |
|---|---|
| Size: | 120 x 25 mm TriCool™ fan |
| Rated Voltage: | DC 12V |
| Operating Voltage: | 10.2V – 13.8V |

| Speed (RPM) | Input Current | Airflow | Static Pressure | Noise | Input Power |
|---|---|---|---|---|---|
| High<br>2000RPM (max.) | 0.24A (max.) | 2.2 $m^3$ / min<br>(79 CFM) | 2.5 mm-$H_2O$<br>(0.1 inch- $H_2O$) | 30 dBA | 2.9 W |
| Medium<br>1600RPM | 0.2A | 1.6 $m^3$ / min<br>(56 CFM) | 1.5 mm-$H_2O$<br>(0.06 inch- $H_2O$) | 28 dBA | 2.4 W |
| Low<br>1200RPM | 0.13A | 1.1 $m^3$ / min<br>(39 CFM) | 0.9 mm- $H_2O$<br>(0.04 inch- $H_2O$) | 25 dBA | 1.6 W |

**Note:** The minimum voltage to start a 120 mm TriCool™ fan is 5V. We recommend that you set the fanspeed switch to high if you choose to connect the fan to a fan control device or to a fan-only connector found on some Antec power supplies. A fan control device regulates the fan speed by varying the voltage, which may start as low as 4.5V to 5V. Connecting a TriCool™ fan set on medium or low to a fan-control device may result in the fan not being able to start because the already lowered voltage from the fan control device will be further reduced by the TriCool™ circuitry below 5V.

## 4.3 Washable Air Filter

From time to time it will be necessary to clean the installed filter. Not washing the air filter will result in higher system temperatures and possible stability problems. We recommend checking the air filter at least once a month initially. The frequency will change depending on system usage (users whose systems run 24/7 will likely have to check/wash more often than those who don't use their systems every day) and on environmental conditions.

To clean the filter:

1. Remove the filter screw on the right side (if installed).
2. Grip the handle on the right side of the intake vent as shown, and pull away from the case.
3. Wash the filter as needed.
4. Latch the filter back into place and secure with screw (if desired).

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